## California Department Health Services Viral and Rickettsial Disease Laboratory

## **Mumps Virus Specimen Collection Form**

Last Name:		F	irst Name:		DOB:/_	_/ Medical Rec #:	<del></del>
Address:							
Phone: Home () Work (							
		□ Asian/ Pace	cific Islande	er □ Am		known ve 🗆 Unknown 🗆 Other:	
Physician Information: Name: Facility:							
					□ ER / Outpatient		
If hospi	talized, admit date:	//	Discharge	date:	// If patient died	, date of death://	
Clinic	al syndrome:				History of clinical my	ımno	
Swelling of parotid gland ☐ Yes ☐ No			No 🗆	Unk	History of clinical mumps (prior to current illness): □ Yes □ No □ Unk		
If yes	, give date of onset of	parotid swelling:	//		Vaccination History:		
Swelling of sublingual or Submaxillary glands		□ Yes □	No 🗆	Unk	# of doses (lifetime) of mumps containing vaccine rec Vaccination Dates (if known):		
Fever		□Yes □	No 🗆	Unk			
URI symptoms (e.g. cough, sore throat)		□ Yes □	No 🗆	☐ Unk Reason if not vaccinated:		ed:	
Asymptomatic		No 🗆	Unk	Exposures/Travel within 4 wks of onset (specify det		etails):	
Other, please describe					Traveled outside of California: Yes No Unk If yes, where:		
Comp	lications (e.g, ord	chitis, meningi	is/enceph	alitis):			
Disease suspected <u>or</u> test requested:					This section for Virus Laboratory use only.  Date received by VRDL and State Accession Number  [ ] SER		
1 <sup>st</sup>	Specimen type and/or s	specimen source	Date Col	lected	1 <sup>st</sup>		[ ] ISOL [ ] FA [ ] RAB [ ] EM
2 <sup>nd</sup>	Specimen type and/or s	Specimen type and/or specimen source Date Collect		lected	2 <sup>nd</sup>		[ ]BE [ ]LC [ ]
3 <sup>rd</sup>	Specimen type and/or specimen source Date Collecte		lected	3 <sup>rd</sup>	[ ]		
Submitter's Complete Mailing Address					Carol Glaser, DVM, MD, Chie Viral and Rickettsial Disease La Division of Communicable Dise California Department of Health 850 Marina Bay Parkway Richmond, CA 94804 phone (510) 307-8585fax (510)	Disease Laboratory nicable Diseases nt of Health Services cway 4	



## CDHS Viral and Rickettsial Disease Laboratory (VRDL) Specimen Collection Guidelines for Mumps Virus Testing

The CDHS Viral and Rickettsial Disease Laboratory (VRDL) encourages submission of specimens from suspected cases of mumps in California. Laboratory diagnosis can be made either by isolation of mumps from urine and/or respiratory specimens or serologic testing.

Appropriate specimens for testing include:

- a. Respiratory specimen; optimal sample is a buccal oral swab transported in 2-3 mls viral transport media (VTM). To obtain a buccal sample, massage the parotid gland area (the space between the cheek and teeth just below the ear) for about 30 seconds prior to collection of the buccal secretions. Use a dacron swab and rub the inside of the right cheek for about 10 seconds with the swab head, then repeat on the left cheek. Ensure that the swab is moist with saliva. A throat or nasopharyngeal swab can also be collected and added together with the buccal swab. Collect as soon as mumps is suspected up to as long as nine days after onset of symptoms.
- b. Urine; at least 20cc collected in a specimen collection cup via clean-catch or bag urine (for pediatric patients) during acute phase of illness. Collect as soon as mumps is suspected up to as long as 14 days after onset of symptoms.
- c. Acute serum for IgM¹. The optimal time of collection is as soon as mumps is suspected. If initial testing is negative, then a convalescent serum sample should be collected; a significant rise in mumps IgG in paired acute and convalescent sera drawn two weeks apart is indicative of active mumps infection.

At a minimum, both urine and respiratory specimens should be collected. Collection of serum samples in pediatric patients is **optional**.

Specimens should be stored at 4°C and shipped on wet ice or cold pack as soon as possible.

- Respiratory specimens can be held at 4°C for 48 hours before shipping. Otherwise, the specimens should be frozen at -70°C and shipped on dry ice.
- Ideally, urine specimens should be sent within 24 hours of collection. Otherwise, urine should be centrifuged at 2,500 times g for 15 minutes at 4°C to pellet the sediment. The sediment should then be resuspended in 2-3 ml of VTM or any cell culture medium and shipped at 4°C. If the pelleted specimens cannot be shipped within 48 hours, the pellet should be frozen at -70°C and shipped on dry ice, if necessary.

Please contact VRDL [Erica Boston: (510) 307-8503)] for further instructions.

<sup>&</sup>lt;sup>1</sup> False-positive IgM results by commercial immunofluorescent antibody assays have been reported. If the suspected case has received one or more doses of MMR, missing, delayed or transient IgM responses may also be seen. VRDL utilizes an in-house developed enzyme immunoassay (EIA) for serologic testing for mumps; there are currently no FDA-approved EIAs for detection of mumps IgM antibody.